

CLAIMS:

1. A method for controlling data flow across a link, said method comprising the steps of:
 - transmitting a packet request message from a first station to a second station;
 - determining if the packet request message is valid;
 - transmitting a request acknowledge message from the second station to the first station;
 - determining if the request acknowledge message is valid,
 - wherein the packet request message and the request acknowledge message each include a control bit string, an identification bit string, and at least one parity bit.
2. A method for controlling data flow across a link as recited in claim 1, wherein said step of transmitting a packet request message further comprises the step of generating the packet request message, wherein said generated packet request message includes a request control code group and a request data code group.
3. A method for controlling data flow across a link as recited in claim 2, wherein said step of generating the packet request message having a request control code group further comprises generating a request non-payload bit string corresponding to a pre-programmed packet request register.
4. A method for controlling data flow across a link as recited in claim 2, wherein said step of generating the packet request message having a request data code group further comprises generating a request data code group bit string having at least one request parity bit and at least one request identification bit.
5. A method for controlling data flow across a link as recited in claim 4, wherein said step of generating the packet request message having at least one request parity bit further comprises generating a first request parity bit corresponding to a parity of said request control code group bit string and a second request parity bit corresponding to a parity of said request data code group.

determining if at least one acknowledge parity parameter is satisfied.

starting a timer upon transmitting the packet request message;
determining if a predetermined period of time has expired; and

determining if the first and second control groups are of a valid and recognized format.

21. A data flow control method for controlling data transmitted across a high speed link as recited in claim 20, wherein said step of determining if a first parity parameter is valid further comprises the steps of determining if the request identification parity bit is valid and determining if the request control code group parity bit is valid.

22. A data flow control method for controlling data transmitted across a high speed link as recited in claim 21, wherein said step of determining if the request identification parity bit is valid further comprises the step of determining if the request identification parity bit represents the parity of the first identification number.

23. A data flow control method for controlling data transmitted across a high speed link as recited in claim 21, wherein said step of determining if the request control code group parity bit is valid further comprises the step of determining if the request control code group parity bit represents the parity of the first control code group.

24. A data flow control method for controlling data transmitted across a high speed link as recited in claim 14, wherein said transmitting a request acknowledge message further comprises transmitting the request acknowledge message, wherein the second parity parameter further comprises an acknowledge identification parity bit and an acknowledge control code group parity bit.

25. A data flow control method for controlling data transmitted across a high speed link as recited in claim 24, wherein said step of determining if a second parity parameter is valid further comprises the steps of determining if the acknowledge identification parity bit is valid and determining if the acknowledge control code group parity bit is valid.

26. A data flow control method for controlling data transmitted across a high speed link as recited in claim 25, wherein said step of determining if the acknowledge identification parity bit is valid further

31. An apparatus for controlling data flow in across a link as recited in claim 28, wherein said storage unit further comprises a memory within said first transmitting unit.

38. An apparatus as recited in claim 28, wherein said request acknowledge message comprises a request acknowledge ordered set.